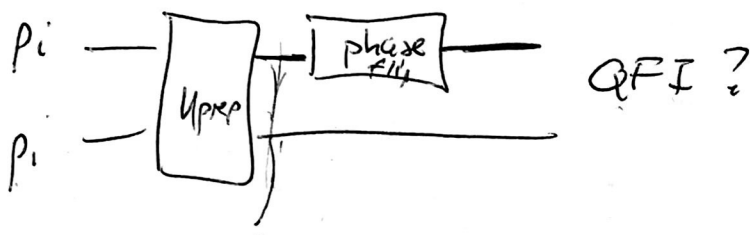Estimate parameter in ~~in~~ ~~to~~ phase flip.

$$\rho \to (1-\lambda)\rho + \lambda \sigma_z \rho \sigma_z$$

want λ

get

ρ_i ──[phase flip]── ρ_f QFI ?

ρ_i ──[U_{prep}]──[phase flip]── QFI ?
ρ_i ──

$$\rho_i = \frac{1}{2}\left(\hat{I} + r\,\hat{\sigma}_x\right)\,??$$

ρ_i ──[U_{prep}]──[phase λ flip]──
ρ_i ──   ──[phase flip α]──

$$H-C-C-O\cdot H$$

with H atoms drawn above and below the two C atoms

$$H-C-C-OH$$